

EXTRA PRACTICE 13
Solving Inequalities
Use after Section 2.7

Name _____

Examples: Solve.

a) $5x - 9 > 6$
 $5x > 15$
 $x > 3$

The solution set is $\{x|x > 3\}$.

b) $4x + 3 \leq 7x + 9$
 $-3x \leq 6$
 $x \geq -2$

The solution set is $\{x|x \geq -2\}$.

Solve.

1. $y + 3 > 9$ _____

2. $x - 7 \geq -3$ _____

3. $5x < 35$ _____

4. $3a + 2 \geq 8$ _____

5. $8x + 3 < 7x + 4$ _____

6. $-9y > 63$ _____

7. $5x - 9 \geq 2$ _____

8. $3x + 4 \leq -2$ _____

9. $10y - 7 > -2y + 17$ _____

10. $3t - 1 \leq 8t + 24$ _____

11. $\frac{3}{4}x < 7$ _____

12. $8y - 7 > 3 - 2y$ _____

13. $6y + 5 \geq 4y + 7$ _____

14. $2m - 1 \geq 5m - 7$ _____

EXTRA PRACTICE 13 (continued)
Solving Inequalities
Use after Section 2.7

15. $5 + 6x > 9 - x$ _____ 16. $10x + 7 \leq 7x - 5$ _____

17. $3x + 1 < 16$ _____ 18. $5x - 4 > 21$ _____

19. $8y - 11 \geq 7y + 2$ _____ 20. $3m - 4 < 7m - 16$ _____

21. $-3x \leq \frac{1}{4}$ _____ 22. $\frac{3}{2}y > -6$ _____

23. $x + 2 \geq 3x - 4$ _____ 24. $7x < 2x + 15$ _____

25. $x - \frac{1}{2} > \frac{1}{3}$ _____ 26. $y + \frac{2}{3} \leq \frac{5}{6}$ _____

27. $15 - 3x > 4x - 13$ _____ 28. $-2 < 5x + 8 - 3x$ _____

29. $17 < 5 - 4y$ _____ 30. $31 > 7 - 6y$ _____